Ground-breaking technology to improve aviation efficiency

7 April 2016 - A new partnership with AVTECH will give the airline industry access to world-leading weather data to minimise fuel use and reduce CO2 emissions.

AVTECH , the Swedish company that develops products and services for digital Air Traffic Management (ATM), has partnered with the Met Office to provide real-time weather data via ground-breaking technology for its Aventus NowCast™ system.

The partnership will see the Met Office provide a technical solution that gives AVTECH access to its high resolution Numerical Weather Prediction (NWP) model data along tailored 4D flight trajectories (latitude, longitude, elevations and time). Incorporated into the AVTECH Aventus NowCast™ system, data is uplinked to aircraft to enable the onboard Flight Management Systems (FMS) to accurately calculate an optimised flight profile.

The technology involved in getting Met Office data to AVTECH and airlines in this way will deliver operational, financial and environmental benefits through increased efficiency of individual flights and networks.

easyJet is one airline currently in the first phase of an agreement with AVTECH to implement the AVTECH Aventus NowCast™ system across its network. The leading European airline, which operates on over 700 routes across more than 30 countries with a fleet of over 240 Airbus aircraft, already receives dedicated weather advice and information from the Met Office team of on-site meteorologists based during winter months at its Operations Control Centre in Luton.

Jon Croome, Aviation Business Development Manager at the Met Office said: "To give AVTECH fast access to the latest global model data along a 4D flight trajectory we worked with our technical team to build a scalable web service request solution. As the aviation industry seeks further efficiency gains, driven primarily by environmental and cost considerations, we expect increased demand for our world-leading numerical weather prediction model data through technology solutions such as this."

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